Work Order ID 86019

June-19-12 4:04:06 PM

86019

Item ID: D3884-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Saddle, Inboard LH

Start Date: 19/06/2012 **Start Qty:** 4.00 *4*

Required Date: 03/07/2012 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** MLJ **Date:** 12/06/20 **Tooling:** **Date:** **Run Start** *NR1*

QC: **Date:** **SPC (Y/N):** **Date:** **Stop** *NR2*

Draw Nbr	Revision Nbr
D3884	B

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100	HAAS CNC VERTICAL MACHINING #1	0.00			B.A 12/10/17	4	1		
100									
HAAS 1	**Memo**	0.00							
HAAS CNC vertical machine #1	Program Batch No. B86019 Double check by:_____ 1-Machine Step No 1 per Folio FA818 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA818 and inspect per attached Dimension Sheets 3-Machine Step No 3 per Folio FA818 and inspect per Dimension Sheets								
110	QC2- Inspect parts off machine FAI/FAIB	0.00			B.A 12/10/17	4	1		
110									
QC	**Memo**	0.00							
Quality Control									

Dart Aerospace Ltd

W/O: 86019	WORK ORDER CHANGES						
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: D3884-1 **PAR #:** _____ **Fault Category:** Machining **NCR:** (Yes) No **DQA:** [illegible] **Date:** 12/10/27

Resolution: _____ **Disposition:** Scrap **QA: N/C Closed:** CK **Date:** 12/10/29

NCR: 12-1964

WORK ORDER NON-CONFORMANCE (NCR)

DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B: **Initial** Chief Eng	**Action Description** Chief Eng	**Sign & Date**	**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
12-10-15	100	1 saddle is under tolerance dimension R .140-.165 is .121 and part was run with +.015 offset and still came out to thin Machine error R.C. ~~programming~~		D Setup have been moved to HAAS 3 and added a note to follos of the 4 models to run exclusively on HAAS 3 or HAAS 4. CK 12-10-17 AND Route B 87493	JL 12-10-15	D. A		DAS 16 12/10/17
		HAAS 1 and HAAS 2 cannot read enough lines in advance to keep up with high feeds when profiling an angle resulting as overcuts and oval shapes SCRAP	JL 12/10/17	#18.66	JL 12/10/17			

NOTE: Date & initial all entries

Work Order ID 86019

June-19-12 4:04:06 PM

86019

Item ID: D3884-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Saddle, Inboard LH

Start Date: 19/06/2012 **Start Qty:** 4.00 *4*

Required Date: 03/07/2012 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00				4	0		
120									
QC	**Memo**	0.00							
Quality Control									
130	Chemical Conversion Coat per QSI005 4.1	0.00				4			
130									
HandFinish	**Memo**	0.00							
Hand Finishing									
140	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00				4X0			
140									
Powdercoat	**Memo**	0.00							
Powder Coating	START TIME: 1:00 OVEN TEMPERATURE: 320°F FINISH TIME: 1:30								

12/10/18

12-10-18

12/10/18

M1228878

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Work Order ID 86019

June-19-12 4:04:06 PM

86019

Item ID: D3884-1 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: Saddle, Inboard LH

Start Date: 19/06/2012 **Start Qty:** 4.00 *4*

Required Date: 03/07/2012 **Req'd Qty:** 4.00 *4*

Reference:

Cust Item ID:

Customer:

Run Start *NR1*

Stop *NR2*

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**

QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC3- Inspect Part Finish	0.00				4	0	12-10-18	
150 QC Quality Control	**Memo**	0.00							
160	Identify as per dwg & Stock Location: 431	0.00				(4)		12/10/18	SP
160 Packaging Packaging	**Memo**	0.00							
170	QC21- Final Inspection - Work Order Release	0.00						12/10/18	
170 QC Quality Control	**Memo**	0.00							

12-10-18

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

June-19-12 4:04:10 PM

Work Order ID: 86019

86019

Parent Item: D3884-1

D3884-1

Parent Item Name: Saddle, Inboard LH

Start Date: 19/06/2012 **Required Date:** 03/07/2012

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP RevA: New issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-017		Manufactured	No				Each	4.0000		4			
D6101-017									**		PD	12/09/25	
Saddle Billet													

Location	Loc Qty	Loc Code
MAT047	4	
74801	4	

→ 87493

4 + 1 = 5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	86019
Description: Saddle, Inboard, LH	Part Number:	D3884-1
Inspection Dwg: D3884 **Rev.** B		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	2.870	2.880		2.875	2.875	2.875	2.875		
B	1.433	1.443		1.438	1.438	1.438	1.438		
C	0.638	0.658		0.652	0.652	0.652	0.652		
D	3.895	3.905		3.900	3.900	3.900	3.900		
E	0.257	0.262		0.259	0.259	0.259	0.259		
F	0.605	0.625		0.615	0.615	0.615	0.615		
G	1.120	1.130		1.1250	1.1250	1.1250	1.1250		
H	2.245	2.255		2.250	2.250	2.250	2.250		
I	2.000	2.020		2.001	2.001	2.0015	2.0015		
J	0.140	0.175		0.147	0.153	0.146	0.148		
K	1.265	1.285		1.268	1.2674	1.2668	1.2667		
L	0.115	0.135		0.131	0.125	0.125	0.125		
M	0.240	0.260		0.256	0.250	0.251	0.251		
N	0.110	0.140		0.140	0.140	0.140	0.140		
O	0.240	0.260		0.260	0.259	0.258	0.258		
P	2.826	2.886		2.870	2.870	2.870	2.870		
Q	0.178	0.198		0.188	0.188	0.188	0.188		
R	0.140	0.165		0.142	0.153	0.141	0.141		
S	0.720	0.780		0.750	0.750	0.750	0.750		
T	1.220	1.280		1.260	1.260	1.260	1.260		
U	1.245	1.255		1.250	1.250	1.250	1.250		
V	5.990	6.010		6.000	6.000	6.000	6.000		
W	2.495	2.505		2.500	2.500	2.500	2.500		
X	0.490	0.510		0.502	0.502	0.500	0.500		
Y	0.020	0.040		0.030	0.030	0.030	0.030		
Z	0.313	0.318		0.315	0.315	0.315	0.315		
AA	0.760	0.765		.760	.760	.760	.760		
AB	0.215	0.220		.218	.218	.218	.218		
AC	0.316	0.321		0.317	0.317	0.317	0.317		
AD	1.745	1.755		1.750	1.750	1.750	1.750		
AE	0.990	1.010		1.002	1.002	1.002	1.002		
AF									
Accept/Reject									

Measured by:	H.O
Date:	12/10/17

Audited by	
Date:	12/10/18

Rev	Date	Change	Revised by	Approved
A	09.10.22	New Issue	KJ	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

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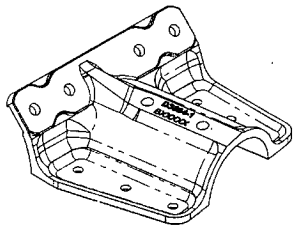
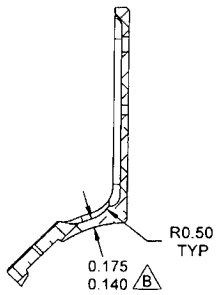
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

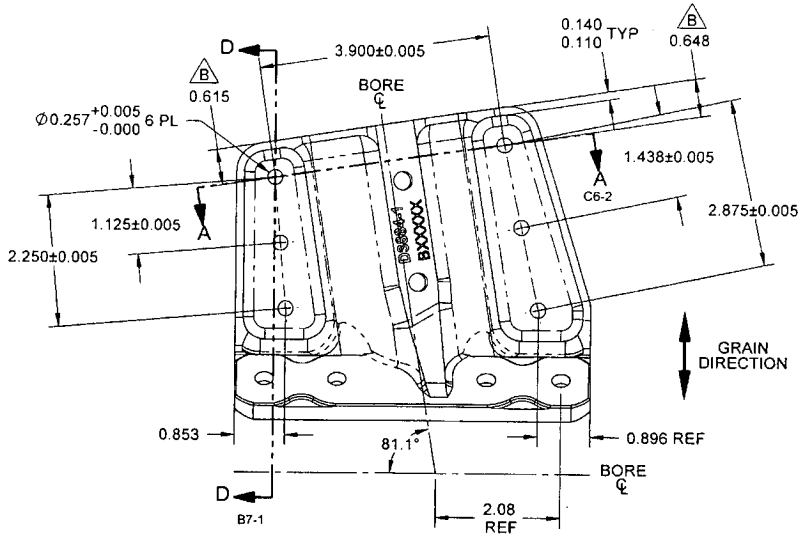
NOTE: Date & initial all entries

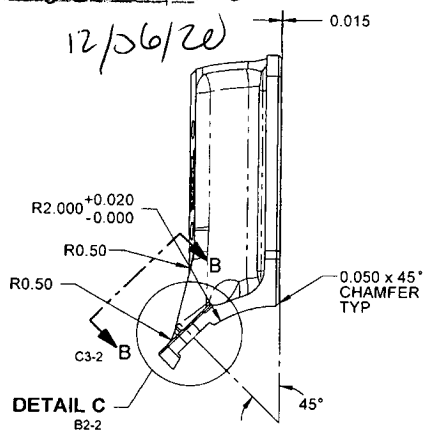
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 86019 MCJ
12/26/20





SECTION D-D B6-1





DETAIL C
B2-2

RELEASED
09/07/15 MP

D3884-1 SADDLE, INBOARD LH (SHOWN)
D3884-2 SADDLE, INBOARD RH (OPPOSITE)

NOTES:
B
1) MATERIAL: 7075-T7351 ALUMINUM PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS-QQ-A-250/12 (REF DART SPEC. D6101-017)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX. DEPTH OF 0.010 WITH A MIN. TOOL RAD OF R0.010
7) WEIGHT: 0.71 lbs

REV.	DESCRIPTION	BY	DATE
B	D6101-017 WAS D6102-017. ZN A6-1; ADD NOTE. ZN C4-2; ADD R0.031. ZN C2-2; INCREASED TOLERANCE 0.175 WAS 0.165. ZN B7-1; ADD 0.615. ZN C6-1, ADD 0.648. ZN C4-1; ADD 0.250. ZN D6-2; ADD 0.060. ZN C2-2; 0.75 WAS 0.65. ZN D7-2	RF	09.06.30
A	NEW ISSUE	RF	09.03.30

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3884	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		INBOARD SADDLE	NTS
DATE	09.06.30		

Dart Aerospace Ltd

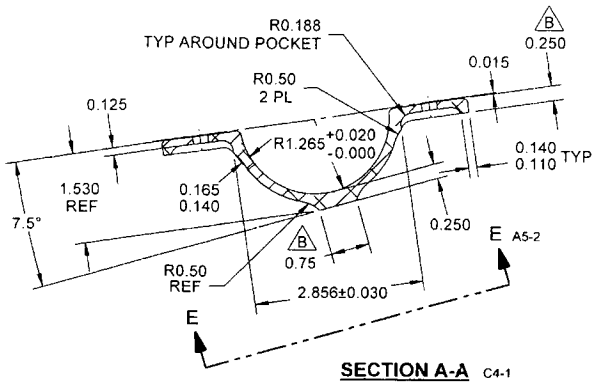
W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

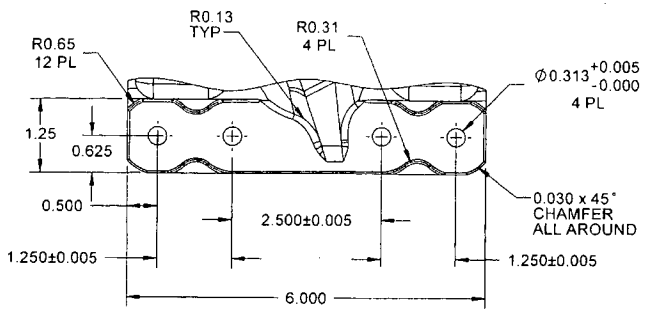
Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

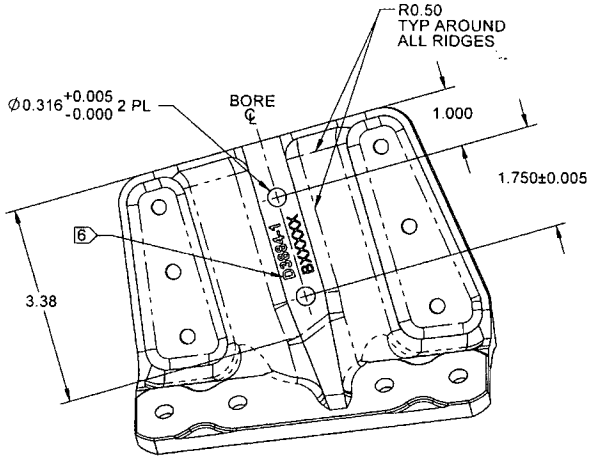
NOTE: Date & initial all entries



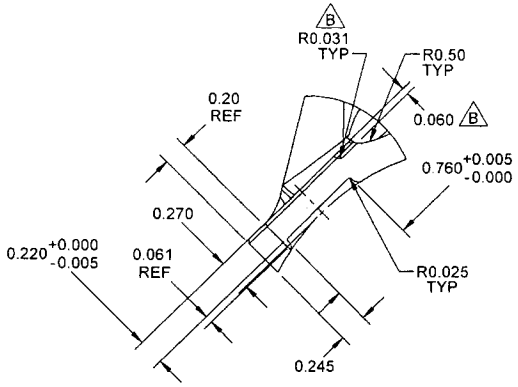
SECTION A-A C4-1



VIEW B-B B3-1
B (ROTATED FOR CLARITY)



VIEW E-E C6-2



DETAIL C B3-1
SCALE 2X

RELEASED
09/07/15

DESIGN	RF	**DART AEROSPACE USA, INC.** PORT HADLOCK, WA
DRAWN	RF	
CHECKED		DRAWING NO. D3884 REV. B
MFG. APPR.		SHEET 2 OF 2
APPROVED		TITLE INBOARD SADDLE SCALE NTS
DE APPR.		
DATE	09.06.30	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries